AMENDMENTS TO THE SPECIFICATION

In the specification:

Please replace the paragraph at page 23, lines 2 through 9, with the following paragraph:

An oligonucleotide trimer, 5'-GAA-3', was synthesised directly on PEG-grafted Rapp beads on 1 μmol scale of synthesis using standard 3'-phosphoramidites. The beads were then subject to 4 more steps of oligonucleotide synthesis, this time according to split-and-mix strategy as outlined in Figure 2, using 7 and 16 different amines, thus producing a library of 256 different 7-mers. After ammonia deprotection the beads were washed and hybridised to 0.05 μmol of 5'-Cy5-TTC.CAG.T (10) (SEQ ID NO: 1) and 5'-Cy5-TTC.TAT.T (11) (SEQ ID NO: 2) as described below.

Please replace the paragraph at page 26, lines 16 through 25, with the following paragraph:

A 225 base pair PCR product was amplified from M13mp18 ssDNA using two oligonucleotide primers; A1 5'ACTGGCCGTCGTTTTAC3'- (SEQ ID NO: 3); B1 5'AAGGGCGATCGGTGCGG 3'- (SEQ ID NO: 4). A1 was synthesised with the addition of a 17 atom linker molecule, and a thiol group, to the 5' end using conventional phosphoramidite chemistry (see figure). The thiol group was activated with a 200 fold excess of DTT, and 5ng of product was spotted on to the gold target plate. Incubation in 100% humidity overnight was sufficient to immobilise the PCR product. Excess template was removed by flooding the plate with 10mM Tris-HCl (pH 7.5).

Please replace the paragraph at page 26, line 28 through page 27 line 4, with the following paragraph:

The oligonucleotide defining the locus, C1 - 5'GTAAAACGACGGCCAGT3' (SEQ ID NO: 5) was synthesised with a phosphate group coupled to the 5' end. Two putative allele defining oligonucleotides were synthesised, D1 and D2- 5'CACGACGTT3' (SEQ ID NO: 6) differing only in their 5' terminus where D1 was tagged with dimethoxytrityl and D2 with

monomethoxytrityl. Both oligonucleotides were synthesised using conventional phosphoramidite chemistry and were fully complementary to the PCR amplified product.

Please replace the paragraph beginning at page 32, lines 1 through 5 with the following paragraph:

3 oligonucleotides were prepared using standard methods

1a 5' Cy-GCAGTCAGTC ACAGAAGGTG TTTCTGA 3' (SEQ ID NO: 7)

1b 5' GCAGTCAGTC ACAGAAGGTG TTTCTGA 3' (SEQ ID NO: 7)

2 5' Cy-GAAACACCTT CTGT 3' (SEQ ID NO: 8)

Please replace the paragraph beginning at page 34, lines 23 through 24, with the following paragraph:

The oligonucleotide had the sequence:
5'-p(s)-TTT TAG CAA TGG GCA GTC AGT CAC AGA AGG TGT TTC TGA GAC C 3' (SEQ ID NO: 9)
with p(s) = terminal thiophosphate.

Please replace the paragraph beginning at page 44, lines 2 through 6, with the following paragraph:

The following oligo sequences were used:-

5'TTTTAGCAATGGGCAGTCAGTCACAGAAGGTGTTTCTGAGACC 3'(template) (SEQ ID NO: 10)

TCAGTCAGTGTCTTC**CACAAAGAC*** (reporter with mass tag) (SEQ ID NO:11)
(probe)